

Geoflo - Hybrid Home Comfort & Hot Water SystemOperation Manual

Rinnai

Congratulations on the purchase of your Rinnai Geoflo hybrid geothermal air conditioning and hot water system. We trust you will have many years of comfort and enjoyment from your appliance.



BEFORE USING THIS APPLIANCE

Before proceeding with the operation or installation read this manual thoroughly and gain a full understanding of the appliance, to ensure safe and correct use.

This appliance must be installed in accordance with:

- · Manufacturer's Installation Instructions
- Current AS/NZS 3000, AS/NZS 5141, AS/NZS 5149, HB 276, AS/NZS 3500
- Local Regulations and Municipal Building Codes including local OH&S requirements
- Plumbing Code of Australia (PCA)

This appliance must be installed, maintained and removed only by an Authorised Person.

For continued safety of this appliance it must be installed and maintained in accordance with the manufacturer's instructions.







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WARNINGS AND IMPORTANT INFORMATION



BEFORE USING THIS APPLIANCE

Always comply with the following precautions to avoid dangerous situations and to ensure optimum performance.

Failure to carefully read and follow all instructions in this manual can result in equipment malfunction, property damage, personal injury and/or death.

DANGER:

Indicates an imminently hazardous situation which, if not avoided, will result in personal injury or death.

WARNINGS:

Indicates a potentially hazardous situation which, if not avoided, could result in personal injury or death.

CAUTIONS:

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or damage to the appliance. It may also be used to alert against unsafe practices.



REGULATORY

This appliance shall be installed in accordance with:

Manufacturer's Installation Instructions.

AS/NZS 3500 National Plumbing and Drainage

AS/NZS 3000 Wiring rules

AS/NZS 5141 Residential heating and cooling systems
AS/NZS 5149 Refrigerating systems and heat pumps

HB 276 A Guide to Good Practice for Energy Efficient Installation

Building Codes of Australia (BCA)

Plumbing Code of Australia (PCA)

Local Occupational Health and Safety (OH&S) regulations

Local Regulations and Municipal Building Codes

This appliance must be installed, maintained and removed by an Authorised Person.

For continued safety of this appliance it **MUST** be installed and maintained in accordance with the manufacturers instructions.

This appliance uses R410A refrigerant.

This appliance is heavy, use proper mechanical lifting devices. Improper lifting may result in serious injury.

Take care when opening or unpacking this appliance. Failure to do so may result in serious injury or product failure.

DO NOT modify the electrical wiring of this appliance. If the control power wiring is damaged or deteriorated then it must be replaced by an authorised person. Failure to do so may result in electric shock, fire, serious injury or product failure.

DO NOT install the Indoor / Outdoor Units / Hot Water Storage Tank (when fitted) on an unstable or non-level surface or where there may be a danger of it falling. It may result in death, serious injury, or product failure.

DO NOT install the Outdoor unit where noise may cause nuisance.

DO NOT install the Outdoor unit where it will be exposed to sea wind (salt spray) as this will reduce durability.



MANDATORY INSPECTION PRIOR TO INSTALLATION

Immediately report any damage or discrepancies to the Supplier of the appliance. This appliance was inspected and tested at the time of manufacture and packaging, and released for transportation without known damage. Upon receipt, inspect the exterior for evidence of rough handling in shipment.

Ensure that the appliance is labelled correctly for the gas and electrical supply, and/or other services it is intended to be connected to.

For safety and warranty purposes, appliances that may be damaged or incorrect **MUST NOT** be installed or operated under any circumstances. Installation of damaged or incorrect appliances may contravene local government regulations. Rinnai disclaims any liability or responsibility whatsoever in relation to the installation or operation of damaged or incorrect appliances.



OPERATIONAL WARNINGS

DO NOT let the Geoflo Hybrid air conditioner run for extended periods when doors or windows are left open. As this may result in an excessive operational loading and lead to product failure.

DO NOT touch, operate or clean the air conditioner with wet hands. It may result in electric shock or product failure.

DO NOT cover or place articles on any part of this appliance.

DO NOT insert hands or other objects through the air inlet or outlet while the appliance is operating. It may result in electric shock, injury or product failure.

DO NOT place a heater or other heating appliances near this appliance, always ensure sufficient ventilation when using this appliance and a heating appliance at the same time. Failure to do so may result in product mis-operation.

Turn main power off before cleaning. Failure to do so may result in fire, electric shock, or product failure.

DO NOT use solvents, abrasives or harsh detergent to clean any part or surface of this appliance. The outdoor unit can be cleaned using a soft, damp cloth and a mild detergent.

DO NOT leave flammable materials near the appliance. It may result in explosion or fire.

If there is excessive noise, smell or smoke coming from the appliance, turn the appliance off, isolate the power supply and contact a service agent.

DO NOT operate the appliance if it has been submerged into water due to flooding, contact a service agent. Failure to do so may result in electric shock, fire, serious injury, or product failure.

This appliance is **NOT** intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they **DO NOT** play with the appliance.

DO NOT block the inlet or outlet of air flow of the Indoor Unit. It may result product failure.

DO NOT drink the condensate water drained from the appliance. This condensate is not potable and may present a health risk if consumed.

DO NOT expose people, animals or plants directly to the cold or hot discharge of the appliance. It may result in serious injury.

DO NOT use an extension cord, manually extend the power cord, or connect other appliances to the same outlet as the geothermal air conditioner.



ACHIEVING OPTIMAL PERFORMANCE

For optimal performance ensure to use the Geoflo Hybrid air conditioner system within the following temperature ranges. Using the air conditioner outside of these ranges, will activate certain safety protection features, that will reduce the appliances performance.

MODE	Cool Mode	Heat Mode
Room Temp.	17 ~ 32°C	4° ~ 32°C

HOT WATER STORAGE TANK SAFETY



This appliance is **NOT** intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they DO NOT play with the appliance.

Hydrogen Gas

If the hot water heater is not used for two weeks or more, a quantity of hydrogen gas, which is highly flammable, may accumulate in the water heater.

To dissipate this safety, it is recommended that a non electrically operated hot tap be turned on for several minutes at a sink, or bath, but not a dishwasher or other appliance.

During this procedure there must be no smoking, open flame or any electrical appliance operating nearby. If hydrogen gas is discharged through the tap, it will probably make a sound like air escaping.

Water Temperature

To meet regulatory requirements the temperature of stored water **MUST NOT** be less than 60°C.

The thermostat on your water heater is factory pre-set to 70°C. The thermostat setting can be adjusted between 60°C and 70°C by an electrician or other suitably qualified trades person.



The thermostat setting must only be adjusted by an Electrician or other suitably qualified trades person.

The access cover to the element and thermostat must only be removed by an Electrician or other suitably qualified trades person.



SCALD HAZARDS, A WARNING ABOUT HOT WATER

Hot water can cause scalding.

Those most at risk are children, the disabled, the elderly and infirm persons. (65°C water can severely burn a child in half a second).

Scalds from hot water taps can result in severe injuries.

Installing tempering valves or thermostatic mixing valves which reduce the hot water temperature delivered to the taps.

Your local plumbing authority may already require that these be fitted.

Contact your installer or local plumbing authority if in doubt.



ALWAYS test the water temperature before use, such as when filling a bath or basin or entering a shower, to ensure it is suitable for the application and will not cause scald injury.

ALWAYS supervise children whenever they are in the bathroom or near other sources of hot water. Ensure any hot water taps are closed firmly after use.

NEVER leave a toddler in the care of another child. They may not understand the need to have the water temperature set at a safe level.

CONSIDER installing child proof tap covers or child resistant taps (both approaches will prevent a small hand being able to turn on the tap).

HOT WATER STORAGE TANK SAFETY DEVICES

For safe operation this water heater is fitted with a combination Pressure & Temperature Relief Valve, a thermostat and an over-temperature cut out for each heating element.



DO NOT tamper with or remove safety devices.

DO NOT operate this water heater unless all safety devices are fitted and in working order.

The operation of the thermal cut out indicates a possibly dangerous situation. **DO NOT** reset the thermal cut out until the water heater has been serviced by a qualified person.

Pressure & Temperature Relief (PTR) Valve

This valve is located near the top of the water heater and is essential for safe operation.



DO NOT seal or block the outlet of the PTR valve or its drain pipe.

DO NOT replace the PTR valve with one that has a higher pressure rating than is specified for the water heater.

The PTR valve should be checked for performance or replaced at intervals not exceeding 5 years, or more frequently in areas with a high incidence of water deposits by a qualified person. The easing gear must be operated at least once every six months or more frequently in areas with a high incidence of water deposits.



Failure to do this may result in the water heater cylinder failing or under certain circumstances, exploding.

Water discharged will be very hot. Exercise care to avoid scald injury. If the valve does not seal again when the easing gear is closed, contact Rinnai to arrange inspection by a qualified person.

It is important you raise and lower the easing gear gently. If the valve does not discharge water when the easing gear lever is lifted, there may be a serious problem and the power supply in the meter box (the switch marked 'Water heater' or 'hot water') or the isolating switch installed near the water heater must be switched off immediately. Contact Rinnai to arrange inspection by a qualified person.



Gently lift lever until water flows from drain line, lower lever gently to close

It is normal for the PTR valve to release a small quantity of water through the drain pipe during heating. If the valve dribbles or leaks continuously, try easing the valve gear for a few seconds. This may dislodge any foreign matter and stop leakage. If leakage does not stop there may be a problem as detailed below:

- If there are heavy flows of water until the water heater is cold which then stops until the water reheats there may be a serious problem and the power supply in the meter box (the switch marked 'Water heater' or 'hot water') or the isolating switch installed near the water heater must be switched off immediately. Contact Rinnai to arrange inspection by a qualified person.
- If there is a steady flow for long periods, often at night, it may be as a result of the water pressure exceeding the
 design pressure of the water heater. Contact your installing plumber as a Pressure Limiting Valve (PLV) may
 be required.

Expansion Control Valve (ECV)

An ECV is recommended in all geographical areas where the water supply has a tendency to cause scaling, including South Australia and Western Australia. Local regulatory authorities may require that an ECV be fitted. The ECV is to be supplied and fitted by the installer. Refer to the section Water Quality for more information on scaling water.

If an ECV is fitted, operate the easing gear at least once every six months to remove any deposits and to verify that it is not blocked.

The ECV should be checked for performance or replaced at intervals not exceeding 5 years, or more frequently in areas with a high incidence of water deposits by a qualified person.

It is normal and desirable that the ECV allows a small quantity of water to be discharged through the drain pipe during the heating cycle. If the valve dribbles or leaks continuously, operate the easing gear for a few seconds. This may dislodge any foreign matter and stop leakage. If leakage does not stop Contact Rinnai to arrange inspection by a qualified person.

ANODE

The water heater is fitted with a sacrificial anode to extend it's life. It will slowly dissipate whilst protecting the cylinder. The life of the water heater may be extended by arranging for an authorised person to inspect the anode and replace it if required. It is recommended that the anode be inspected at least every 5 years.

The factory fitted Rinnai anode is Magnesium based. This anode is suitable when the total dissolved solids (TDS) content in the water supply does not exceed 600 mg/L, which is the case in most areas. In areas where the total dissolved solids (TDS) content in the water supply exceeds 600 mg/L the Rinnai aluminium based anode is required.

WATER QUALITY

The water quality of most public supplies is suitable for the water heating system. The water quality from bore wells is generally unsuitable for the water heating system.

Refer to the 'Warranty Conditions' in the warranty booklet supplied with the Water Storage Tank for water quality parameters and how they affect the warranty conditions.

If in doubt about the water quality, have it checked against the parameters listed in the warranty conditions. If sludge or foreign matter is present in the water supply, a suitable strainer filter should be incorporated in the water supply to the system.

SYSTEM WARRANTY EXCLUSIONS



Rinnai product warranty excludes faults and failures caused by improper use and abuse; fair wear and tear; or failure to follow instructions regarding installation, service and maintenance.

It is very important that you maintain your appliance and have it serviced regularly.

It is a condition of warranty that you adhere to the maintenance and service requirements as set out in this manual.

Compliance with these requirements will prolong the useful life of your appliance and help ensure it operates efficiently.

The "Routine Maintenance & Service Schedule - Indoor & Outdoor Units" on page 14 and "Routine Maintenance & Service Schedule - Hot water Storage Unit" on page 17 specifies certain maintenance actions to be performed at prescribed intervals by qualified licensed technicians.

These schedules should also be fully completed and retained as a record of who carried out the service, the date and actions taken.

FAILURE TO CARRY OUT THE REQUISITE MAINTENANCE, SERVICING AND RECORDING REQUIREMENTS MAY VOID YOUR PRODUCT WARRANTY.

PLEASE REFER TO "WARRANTY" ON PAGE 19 FOR FULL DETAILS.

SYSTEM & OPERATION INFORMATION

Congratulations on your excellent choice and sound investment in a Rinnai Ducted Reverse Cycle Geoflo hybrid home comfort and hot water system. Please also take the time to read the contents of this Manual, register your product warranty and retain this document for future reference.

The operation of your systems is controlled by the indoor Thermostat / Controller. Simply adjust the Controller to maintain the indoor temperature at the level you select, subject to it being within the design conditions of the system. Typical settings are 24°C and 20°C for Cooling and Heating respectively.

The Rinnai Geoflo Hybrid System will automatically modulate in response to the demand of the conditioned space, to help ensure rapid cool down or warm up times, as well as providing more constant temperature control. Please refer to the Operating Instructions accompanying your Thermostat / Controller.

Your new Geoflo Hybrid System is among the most reliable home comfort solutions available today. To achieve the performance and efficiency expected from your new system, please ensure the Installer is a qualified tradesperson, that the Installer has designed, specified and commissioned the entire system and instructed you on its operation.

To assure its dependability, learn about the operation of your system and the small amount of maintenance it takes to keep it operating at its peak efficiency. With minimal care, your Rinnai system will provide you and your family with satisfying home comfort - both now and for many years to come.



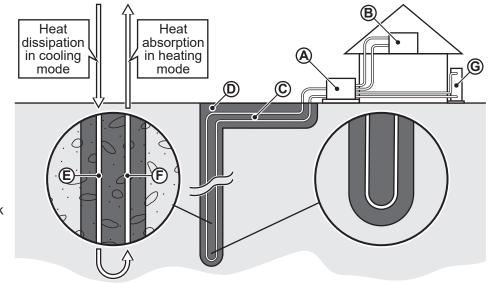
Improper installation, adjustment, alteration, service, maintenance, or use, can cause explosion, fire, electric shock, or other conditions which may cause personal injury or property damage. Refer to this document or and or other accompanying manuals.

For assistance or additional information consult Rinnai, a qualified installer or authorised service agency. The qualified installer or agency **MUST** use **ONLY** factory authorised components or accessories if and when servicing this product.

OPERATION PRINCIPLES

Operation Diagram

- (A) Outdoor unit
- B Indoor unit
- C Connection trench
- Bore shaft (ø120mm)
- (E) Vapour (gas) line
- (F) Liquid line
- G Hot Water Storage Tank (when fitted)



Cooling

When operating in the COOL mode, Geoflo Hybrid System will extract heat from your space and discharges it to the ground until the indoor temperature is lowered to the level you have selected (within design conditions). On extreme hot days, your system will run for longer time periods and have shorter off periods than on moderate days.

The following typical conditions add extra heat and/or humidity to your home causing your system to work longer to maintain comfortable conditions:

- Entrance (external) doors are frequently opened & closed.
- More than the usual number of people.
- Operating laundry appliances or running showers.
- Window furnishings open on sunny side of home.
- More than the usual lights or electrical appliances operating.
- System operating at or outside the original system design conditions as specified by your Installer

Heating

In HEAT mode, the system will provide warmth until the temperature is raised to the level you have selected. The unit will operate for longer periods to maintain a comfortable environment on colder days and nights than on moderate ones.

In this heating process for the indoor space hot R410A gas condenses into a cold liquid. This cold liquid will return back to the Geoflo cabinet and is sprayed into a very cold mixture of gas-liquid by means of an electronically controlled expansion valve. This cold mixture is then drawn into the ground loop heat exchanger and absorbs heat from earth and is converted to pure superheated gas. This super-heated gas returns to the compressor and completes the heating cycle.

Well Recovery Cycle: When the system provides heating to your home and the ground loop heat exchanger drops below 0°C, moisture may begin to freeze around the loop. If allowed to build up, this ice would impede the heat transfer across the ground loop heat exchanger and reduce the amount of heat absorbed from the earth. To maintain energy efficient operation, your Rinnai Geoflo Heat Pump has an automatic Well Recovery Cycle.

The well recovery will automatically start when there is sufficient ice to interfere with normal heating operation. During recovery, the Indoor Fan will not be running. After the ice is melted, or after a maximum of between 5 to 10 minutes in well recovery mode, the unit will automatically resume normal heating operation.

Hot Water Storage Tank Operation

When Geoflo hybrid system is running on cooling mode the indoor fan coil unit extracts heat from indoor space and transfer it to the outdoor cabinet. Rinnai integrated control system will monitor the storage tank temperature and transfer the abundant heat to the water by means of a circulation pump and heat exchanger. Once the hot water demand is satisfied, the controller stops the hot water circulation pump and divert the heat to the ground loop.

In heating mode the ground loop heat exchanger extracts heat from earth and transfer it to the indoor space. Rinnai integrated control system will monitor the storage tank temperature and transfer the excess heat to the water by means of a circulation pump and heat exchanger. Once the hot water demand is satisfied, the controller stops the hot water circulation pump.

THERMOSTAT Wi-Fi SET-UP

Step 1. Initial Set-up

After initial power up, follow the prompts on the screen:

- Choose the language of your choice. Select 'Next'.
- Choose Home/ Business application. Select 'Next'.
- Give a unique name for your thermostat. Select 'Next'.
- Choose system type. Select 'Next'.
- Choose from Heating/ Cooling/ Heating and Cooling.
 Select 'Next'.
- Choose number of stages. Select 'Done'.
- Select 'Help' anytime, or visit online installation help and support site for setup videos and FAQ sections. or visit: https://www.mytotalconnectcomfort.com
- Setup menu can be revisited anytime to make a change by selecting 'Menu' > 'System Setup' from home screen.

Step 2. Connect to the Wi-Fi Network

All the initial setup settings will be saved automatically. Follow prompts on the screen:

- Select **'Yes'** to connect the thermostat to the Wi-Fi network. Alternatively select **'I'll do it later'**.
- Select Home network from the list of Wi-Fi networks on the display then enter the home network password. Select 'Done'.
- The thermostat will display "Connecting to your network.
 Please wait..." then shows a "Connection Successful" screen.





- Select 'Done'. The thermostat will display the home screen.
- Wi-Fi setup can be changed by touching 'Menu' from home screen > 'Wi-Fi Setup'.

Step 3. Register your Thermostat online

- Use phone/ Tablet/Laptop to visit: https://www.mytotalconnectcomfort.com
- Click 'Create Account'. Complete account profile by entering location and email address.
- You will receive an activation email, click the link to activate TCC account.
- Log in, enter your Wi-Fi 9000 thermostat unique *MAC ID and CRC code to complete the registration process for remote control.



*MAC ID and CRC code can be found on the back of the thermostat or ID card in the package. It also displays on the thermostat screen, select 'Menu' > 'Wi-Fi Setup'.

Step 4. Download the free App

Download FREE **Total connect Comfort** app from App Store / Google Play. Login to your My Total Connect Comfort account created.

You are ready to go!



Advanced Preferences are available from the thermostat 'Menu' > 'Preference' > 'Advanced Preferences'.



Frequently Asked Questions

Question: Will my thermostat still work if I lose my Wi-Fi connection?

Answer: Yes, the thermostat will operate your heating and/or cooling system with or without Wi-Fi.

Question: How do I find the password to my router?

Answer: Contact the manufacturer of the router or check the router documentation or label.

Question: Why isn't my thermostat connecting to my Wi-Fi router even though it is very close to the thermostat?

Answer: Verify that the password entered for the Wi-Fi router is correct.

Question: My thermostat is unable to register to the Total Connect Comfort website.

Answer: Verify that the thermostat is correctly enrolled on your home Wi-Fi network. At Menu > Wi-Fi Setup,

check for the Wi-Fi signal strength icon. Verify that the Wi-Fi router has a good internet connection. On your computer, verify that you can open the site at www.mytotalconnectcomfort.com If you cannot open the site, switch off the internet modem for a few seconds, then power it back on.

Question: I registered on the Total Connect Comfort website but was unable to login using my new account.

Answer: Check your email and ensure that you received an activation email. Follow the instructions to

Check your email and ensure that you received an activation email. Follow the instructions to activate your account and then login to the website.

Question: I have signed up on Total Connect Comfort website and have not received a confirmation email.

Answer: Check for the email in your Junk or Deleted folder.

Question: Is there a way to extend the signal strength?

Answer: Most standard routers can be set up to be a repeater. You can also purchase and install a Wi-Fi

repeater.



Detailed information regarding thermostat setting and operation is provided in the manual(s) supplied with the thermostat.

CARE & MAINTENANCE

With proper maintenance and care, your Rinnai system will operate economically and dependably. To assure its dependability, learn about the operation of your system and the small amount of maintenance it takes to keep it operating at its peak efficiency. With minimal care, your Rinnai system will provide you and your family with satisfying home comfort - both now and for many years to come.



Improper installation, adjustment, alteration, service, maintenance, or use, can cause explosion, fire, electric shock, or other conditions which may cause personal injury or property damage. Refer to this document or and or other accompanying manuals.

For assistance or additional information consult Rinnai, a qualified installer or authorised service agency. The qualified installer or agency should use only factory authorised components or accessories if and when servicing this product.

CUSTOMER MAINTENANCE



Turn off the power before you perform any form of maintenance; otherwise it may cause electric shock.

NEVER use water that is hotter than 40°C when you clean the filters. It may cause deformation or discolouration.

NEVER use volatile or harsh substances when you clean the filter. They may damage the surface of the product.

To better protect your investment and to eliminate unnecessary service calls, please familiarise yourself with the following:

- Your Indoor Unit should **NEVER** be operated without a properly installed and clean filter. Inspect the filter periodically. As a clogged filter will increase operating costs and shorten the life of the unit. Supply-air and return-air registers (grilles) should not be blocked or obstructed. Restricted airflow lessens the unit's efficiency and life span.
- Your Thermostat / Controller is the control centre for your system. Please familiarise yourself with its specific operation, as the information following is of a general nature.
- Attempting to control the system by other means for instance, switching the electrical supply power ON and OFF, may cause damage to the unit.
- Thermostat 'jiggling' causes rapid-cycling, which is potentially dangerous to the compressor and may blow the
 protective fuse or circuit breaker device at the mains power supply. DO NOT adjust the temperature on the
 thermostat for any reason for at least five (5) minutes after the compressor has shut off.
- Your system removes humidity from your home while cooling. The Indoor Unit has a (primary) condensate
 connected to your drainage system; but an overflow (secondary) drain MUST also be installed. If water is
 observed in the overflow drain it may be clogged, and your installer or Rinnai should be contacted for inspection.

After long periods of non-use, or before periods of frequent use, do the following:

Check for damaged wires and call for service as necessary.
 Clean all filters.
 Check for leaks.

COMPONENT	DESCRIPTION	INTERVAL
Indoor	Clean filter	Every two weeks
Unit	Professional service, in accordance with service "Routine Maintenance & Service Schedule - Indoor & Outdoor Units" on page 14.	Annually
Outdoor Unit	Professional service, in accordance with service "Routine Maintenance & Service Schedule - Indoor & Outdoor Units" on page 14.	Annually
Hot Water	Check ECV & PTR.	6 Monthly
Storage Tank	Professional service, in accordance with service "Routine Maintenance & Service Schedule - Hot water Storage Unit" on page 17.	See page 17



Make sure have your appliance professionally serviced once per year, failing to do so may decrease the operational efficiency or increase energy consumed.

CLEANING



Turn off the power before you perform any maintenance; otherwise it may cause electric shock.

When removing filter, do not touch metal parts in the unit. The sharp metal edges can cut you.

DO NOT use water to clean the inside of the indoor unit. This can destroy insulation and cause electrical shock.

DO NOT use chemicals or chemically treated cloths to clean the unit.

DO NOT use benzene, paint thinners, polishing powder or other solvents to clean the unit. They can cause the plastic surface to crack or deform.

NEVER use water that is hotter than 40°C when you clean the front panel. It may cause deformation or discolouration.

NEVER use volatile substances when you clean the filters. They may damage the surface of the product.

DO NOT expose filter to direct sunlight when drying as this can shrink the filter. Ensure filters completely dry before re-inserting.

NEVER operate the system without the filter in place.

Indoor Unit

Use a soft dry cloth to wipe the indoor unit clean, if especially dirty, you may use a warm damp cloth.

Air Filters

The air filters require inspection and cleaning at least every to weeks. Consult your installer for the location of filtres and ducted systems



Oil level **MUST** be checked & maintained to the sight glass **EVERY TWO YEARS**. Failing to maintain the oil level will cause pre-mature failure of compressor and voids warranty.

Outdoor Unit

The outdoor (condensing) unit circulates R410a refrigerant into the ground loop heat exchanger and indoor unit. Periodic inspection is required to ensure vegetation has not grown around the unit (plants, weeds etc.). The cabinet should be kept clean and ensure there is no water build up (including from condensate drain) on or around the unit.



A dirty air filter will reduce the efficiency, effectiveness and air quality of your system.

Failure to clean the filters regularly can also cause condensation to form and drip from the indoor unit when operated in cooling mode during humid conditions.

CUSTOMER CARE PROGRAM

Please ensure you register your product warranty on line at rinnai.com.au.

The Rinnai Customer Care Program is designed to help you get the most out of your new system.

Service and maintenance in accordance with the "Routine Maintenance & Service Schedule - Indoor & Outdoor Units" on page 14 is essential in ensuring the prolonged useful life of your system, and help ensure it operates at optimum efficiency. We may contact you before each winter or summer season with preferential offers for preventative maintenance services which will keep your Rinnai system in optimal condition.



Service maintenance is not covered under warranty and is a chargeable service. All units must have safe and reasonable access and be installed in compliance with the installation instructions supplied with the unit. Some installations may require two service personnel to attend, in accordance with Health and Safety requirements.

Failure to provide safe and reasonable access for service tasks may incur additional costs **NOT** covered by the product warranty.

ROUTINE MAINTENANCE & SERVICE SCHEDULE - INDOOR & OUTDOOR UNITS

Your Rinnai Air Conditioning System should be maintained annually after the date of installation by a qualified licensed technician in accordance with the Schedule below. Failure to do so during the product warranty period may void your warranty. This periodic service and maintenance will prolong the useful life of the unit, and help keep it running safely and at optimum efficiency.

Date of Installation	/ /	Installed By:				
Service Year	1	2	3	4	5	6
Service Date	/ /	/ /	/ /	/ /	/ /	/ /
Service Company / Technician						
Ambient Temperature at CDU (°C)						
ELECTRICAL		Γ				
Wiring, Electrical connections						
Fan Motors						
Capacitors (if applic)						
Printed circuit boards						
MAJOR COMPONENTS						
Outdoor unit clearances						
Outdoor unit condensate tray						
Outdoor unit condensate drain						
Outdoor unit fixing						
Indoor unit condensate tray						
Indoor unit condensate drain / pump						
Refrigerant charge						
Refrigeration connections						
Fan assemblies						
Return Air grille & filters						
CONTROLS						
Wall control operation						
System Operation						
Sequence of operation						
Return Air Temp - Cooling/ Heating	°C	°c	°C	°C	°C	°C
Outlet Air Temp - Cooling / Heating	°C	°c	С	°C	°C	°C
Outdoor unit - Liquid line pressure	kPa	kPa	kPa	kPa	kPa	kPa
Outdoor unit - Suction line pressure	kPa	kPa	kPa	kPa	kPa	kPa
GENERAL INSTALLATION-RELATED AND 31	d PARTY COMPONENT	S (NOT RINNAI PRODU	CTS) *			
Airflow through system						
Refrigerant pipework						
Safety tray						
CONSUMABLES **		1				
Capacitors						
Filters						
Batteries (If applic)						
* Installation and other field-supplied components are not covered by Rinnai Product Warranty. These include, but are not limited to, control wiring, refrigerant gas and electrical connections to the appliance. These should be inspected as they can affect the performance, reliability and safety of the system. ** Units contain consumable items that may require periodic replacement and are not covered by Rinnai product warranty (e.g. filters, capacitors and batteries)						
ACTION CODES						
Inspected - Working Correctly - No	Action Required	Adjusted Part	Cleaned Part	Replaced Part	Repaired Part	Referred to Installer
✓		Α	С	R	RP	RI

TROUBLESHOOTING - INDOOR & OUTDOOR UNITS

If problems persist contact a local dealer or your nearest customer service centre. Provide them with a detailed description of the unit malfunction as well as your model number.

SYMPTOM	CAUSE		
Thermostat display is blank	Make sure the power at the indoor and outdoor units is on. Otherwise contact Rinnai for advice.		
Cannot change system setting to cool	Check at the system screen "Your thermostat controls" or "You system type" is set to match your heating / cooling equipment.		
Fan does not turn on when heat is required	Check at the system screen "Your fan controls" is set to match your heating / cooling equipment.		
"Wait" appears on screen	Compressor protection feature is engaged. Wait 5 minutes for system to restart safely, without causing damage to the compressor.		
Unit does not turn on when pressing ON/ OFF button.	The unit has a 5 minute protection feature that prevents the unit from overloading. The unit cannot be restarted within five minutes of being turned off.		
Heat pump issues cool air during heating	Check at the system screen "Type changeover valve" to make sure it is properly configured for your system.		
mode or warm air during cooling mode	For more information refer to the manual(s) supplied with the thermostat.		
	Touch system to set to heat. Make sure the temperature is set higher than the room temperature.		
	Touch system to set to cool. Make sure the temperature is set lower than the room temperature.		
Heating / cooling system does not respond	Make sure the power at the indoor and outdoor units is on. Otherwise contact Rinnai for advice.		
	If "Wait" is displayed, the compressor protection feature is engaged. Wait 5 minutes for system to restart safely, without causing damage to the compressor.		
Heating system is running in cooling mode	Check at the system screen "Your thermostat controls" or "Your system type" is set to match your heating / cooling equipment.		
The unit changes from COOL/HEAT mode	The unit may change its setting to prevent frost from forming on the unit. Once the temperature increases, the unit will start operating in the previously selected mode again.		
to FAN mode.	The set temperature has been reached, at which point the unit turns off the compressor. The unit will resume operation when the temperature fluctuates again.		
The outdoor unit emits white mist.	When the unit restarts in HEAT mode after defrosting, white mist may be emitted due to moisture generated from the defrosting process.		
The indoor unit makes noises.	Is the filter dirty or the return ductwork restricted? Water flowing noise is the sound of refrigerant flowing inside the indoor unit and is normal.		
Doth the indeer unit and suite an unit make	Low hissing sound during operation: This is normal and is caused by refrigerant gas flowing through both indoor and outdoor units.		
Both the indoor unit and outdoor unit make noises.	Low hissing sound when the system starts, has just stopped running, or is defrosting. This noise is normal and is caused by the refrigerant gas stopping or changing direction.		
The outdoor unit makes noises.	The unit will make different sounds based on its current operating mode.		

SYMPTOM	CAUSE		
The unit emits a bad odour	The unit may absorb odours from the environment (such as furnitur cooking, cigarettes, etc.), which may be emitted during operation.		
	The unit's filters have become mouldy and should be cleaned.		
The fan of the outdoor unit does not operate.	During operation, the fan speed is controlled to optimise performance.		
	Is the thermostat operating properly and is it on the proper heat/cool temperature setting? Check that the air conditioner has not been turned off automatically by a programmed off timer.		
	Timer is activated. Turn timer off		
	Air is not circulating properly. Make sure that there are no curtains, blinds or furniture blocking the front of the air conditioner.		
	The air filter is dirty. Clean the air filter once every 2 weeks. See "Cleaning Air Filter" for more information.		
	The room temperature is too high. In summer, it may take some time to cool indoor air. In this case, select the turbo cool operation to cool indoor air quickly.		
	The desired temperature is higher than the set temperature. Set the desired temperature to a level lower than the current temperature.		
The Outdoor Geothermal stops running.	There is a heating source nearby. Avoid using a heat generator such as an electric oven or a gas burner while the air conditioner is in operation.		
	The FAN ONLY mode of operation is selected. In this mode, air blows from the air conditioner without cooling or heating the indoor air. Switch the operation mode to the cooling, heating or auto.		
	The air inlet or outlet of either unit is blocked. Turn the unit off, remove the obstruction and turn it back on.		
	Doors and windows are open. Make sure that all doors and windows are closed while operating the unit.		
	Excessive heat is generated by sunlight. Close windows and curtains during periods of high heat or bright sunshine.		
	Too many sources of heat in the room (people, computers, and electronics etc). Where possible reduce the amount of heat sources.		
	Low refrigerant due to a leak or after long-term use, contact Rinnai.		
	The outdoor temperature is lower than 7°C. Use an auxiliary heating device.		
Poor heating performance.	Doors and windows are open. Make sure that all doors and windows are closed while operating the unit.		
It is not possible to adjust the fan speed.	In some operation modes, you cannot adjust the fan speed. Select an operation mode in which you can adjust the fan speed.		
It is not possible to adjust the temperature.	In some operation modes, such as the auto or fan only modes, you cannot adjust the temperature. Select an operation mode in which you can adjust the temperature.		



Detailed information regarding thermostat setting and operation is provided in the manual(s) supplied with the thermostat.

If problems persist contact a local dealer or your nearest customer service centre for advice.

ROUTINE MAINTENANCE & SERVICE SCHEDULE - HOT WATER STORAGE UNIT

If overflow tray and drain are fitted, it is the users responsibility to have these checked periodically to ensure there are no blockages.

The user should operate the easing gear of the ECV and PTR valve (if fitted) every 6 months as described under "Expansion Control Valve (ECV)" on page 7.

Rinnai service network personnel are fully trained and equipped. If your Rinnai appliance requires servicing contact Rinnai as per the details on the back page of this manual. Rinnai recommends that when used as a commercial appliance it should be inspected and serviced by a qualified person every 12 months.

The ECV and PTR valve **MUST** be checked for performance or replaced by a qualified person at intervals not exceeding 5 years or more frequently in areas where the water is classified as scaling water. Refer to both the "Anode" and "Water Quality" on page 8 for Anode selection, inspection and maintenance requirements).

If the electric supply conduit to the water heater is damaged, it **MUST** be replaced by a qualified person in order to avoid a hazard.

TROUBLESHOOTING - HOT WATER STORAGE UNIT

Check the items below before requesting a service. Service and parts charges may be incurred where it is found that there is no fault with the water heater and the issue is related to the plumbing installation or is due to the failure of water or electric supplies.

Insufficient or no hot water				
Is the electricity supply connected?	Check that the isolating switch marked "HOT WATER" or "WATER HEATER" at the meter box is switched on. Check also that any isolating switches installed near the water heater are switched on.			
	Check the fuse or circuit breaker marked "HOT WATER" or "WATER HEATER" at the meter box. Repeated failure of fuse or tripping of circuit breaker indicates a fault which must be investigated by an authorised trades person.			
Is your unit a Twin Element electric water heater?	A twin element model (non-simultaneous) must have a continuous electricity supply to the top heating element. Check that this is the case.			
Are you using more hot water than you think?	Often it is not realized how much hot water is actually used. This applies especially to showering. Review hot water usage, especially the time taken for showering, and investigate the use of flow control valves or Water saving shower roses.			
Are water heater valves discharging excessively?	Refer to the section "Hot Water Storage Tank Safety Devices" on page 7.			
Thermostat settings?	Check the temperature of hot water delivered with a thermometer placed under the closest outlet (usually the kitchen sink) on a non-tempered hot water line.			
	This test should be done early in the morning after overnight electrical boosting before any hot water is used. The temperature of the water delivered should be at least 55°C (allowing for heat losses in pipe work).			
	If this is not the case, the temperature may need to be increased. Contact your installer or Rinnai to discuss adjusting the thermostat.			
No water from the hot tap?	Restriction in the hot tap or failure of the cold water supply to the heater.			
	Check for water flow at the other hot taps and that the cold water isolation valve is fully open.			

High Electricity Bills	
If you think your electricity bill is too high, check for these possibilities. If, after investigating, and you still require assistance contact Rinnai.	You may be using more hot water than you think. This applies especially to showering. Review hot water usage, especially the time taken for showering, and investigate the use of flow control valves or 'water saving' shower roses. Investigate recent changes to hot water usage patterns.
	Water heater valves may be discharging excessively. Refer to the section Refer to the section "Hot Water Storage Tank Safety Devices" on page 7.
	There may be hot water leakages in hot water pipes or taps. Have these checked and rectified by a plumber.
	There may have been changes in electricity tariffs since your last bill.

NON RINNAI SUPPLIED COMPONENTS & ACCESSORIES

Your home comfort system may include installer supplied components and accessories that do not form part of this regular maintenance cycle. These may include: ductwork, fittings, filters, grilles, zone motors, auxiliary heaters, third party controls and other non Rinnai supplied items.

These items may also require attention in accordance with the Original Equipment Manufacturer's (OEM) recommendations. Your installer can provide details in this regard, and should be consulted for any warranty or service matters for these items. Whilst they are an integral part of your home comfort system, these non Rinnai items are not covered by your Rinnai Product Warranty.

Third party controls and zoning systems that interfere with the correct operation of your Rinnai Heat Pump system, and any consequential damages to Rinnai equipment as a result of such incorrect operation, will not be covered by Rinnai Warranty

INSTALLATION RECORD

The Installation Record is a reference for the end user, help line staff and service technicians. Ensuring that this information is available here will be helpful in the event that a service enquiry is required.

Installer Details		
Installa	ition Company Name:	
	Address:	
Telep	hone / Mobile Phone:	/
	Email:	
Certificate of Complian	nce / Certification No.:	
Authorised P	ersons - Licence No.:	
	Installers Name:	
	Installers Signature:	
	Installation Date:	
DSGEV18Z1 Syst	tem Details	
System Component	Model	Serial No *
Indoor Unit	DIGEV18Z1	
Outdoor Unit	DOGEV18Z1	
Hot Water Storage Tank	SE250AB36 SE315AB36	
* This info		be copied from the data plate, located on the appliance.
Insta	allation Address:	



TERMS OF WARRANTY – AUSTRALIA

Rinnai Australia Pty. Ltd. ABN 74 005 138 769, 100 Atlantic Drive, Keysborough VIC 3173.

NOTICE TO CONSUMERS UNDER AUSTRALIAN CONSUMER LAW

Our goods and services come with guarantees that cannot be excluded under the Australian Consumer Law.

For a major failure with a good, you are entitled to a replacement or refund and compensation for any other reasonable foreseeable loss or damage. If the failure does not amount to a major failure and if the goods fail to be of acceptable quality, you are also entitled to have the goods repaired or replaced.

For a major failure with the service, you are entitled to cancel your service contract with us and obtain a refund for the unused portion, or to compensation for its reduced value. You are also entitled to be compensated for any other reasonably foreseeable loss or damage. If the failure does not amount to a major failure you are entitled to have problems with the service rectified in a reasonable time and, if this is not done, to cancel your contract and obtain a refund for the unused portion of the contract.

The benefits provided by this Warranty are in addition to any other rights and remedies available to a consumer under the Australian Consumer Law and any other law which may apply to the goods and or services.

1 DEFINITIONS

The terms listed below shall have the following meanings:

- 1 "Authorised Service Representative" means an independent service contractor authorised by Rinnai or Rinnai service personnel.
- 2 "Rinnai" means Rinnai Australia Pty Ltd (ABN 74 005 138 769) and any related company.
- 3 "Certificate(s) of Compliance" means certificate(s) issued by licensed personnel (including plumbers, refrigeration mechanics, electricians or other relevant tradespeople) to certify that any prescribed works comply with applicable regulatory requirements.
- 4 "Certificate(s) of Occupancy" means certificate(s) issued by the local government authority (or similar organisation) which certifies that a home can be occupied.
- 5 "Installation Site" means the site at which the Product is originally installed.
- **6** "Normal Business Hours" means 8:30am to 5:00pm Monday to Friday, excluding public holidays.
- 7 "Operating/Installation Instructions" means the user manual or other documentation which provides detailed instructions on the proper operation and maintenance of the Product.
- 8 "Other Applications" means any Product used for purposes other than Residential & Light Commercial Applications. Other Applications may include but are not limited to factory, IT/Server room, telephone exchange, processing area (e.g. bakery, kitchen, warehouse, swimming pool, agricultural facilities such as a nursery). Any Product which has been installed, for whatever purpose, as a retrofit component to an existing system, will also be classed as being part of an "Other Application" regardless of the purpose of use of the existing system into which such product has been installed.
- **9** "Purchaser" means the end user of the Product, the person named as owner in the Warranty certificate, the holder of the Proof of Purchase or the holder of a property transfer document where the Product is included as part of the chattels.
- 10 "Product" means the equipment purchased by the Purchaser and described in Section 2 of this document.
- 11 "Proof of Purchase" means a Tax Invoice or Receipt in respect of the Product. In the case of new constructions, a Certificate of Occupancy or a Certificate of Compliance that details the date of installation or commissioning will suffice.
- **12** "Qualified Installer" means the qualified installation contractor who is responsible for performing the installation work in the manner prescribed by local and statutory regulations, including compliance with any relevant and to Rinnai specifications, including Australian Standards.
- **13** "Residential & Light Commercial Applications" means any Product for use in residential or light commercial applications where
 - a) the Product is solely used for the purpose of human comfort; and
 - b) the ambient temperature of the space the Product is intended to heat or cool is influenced solely or primarily by natural exterior weather conditions rather than by man-made or mechanical heat sources.

Examples of Residential & Light Commercial Applications include, homes, offices, hotels, apartments, nursing homes, hospitals, health care premises, shopping centres, and retail stores.

2 TERMS OF WARRANTY

2.1 Subject to the Terms of Warranty set out in this document, effective from the date of purchase by the Purchaser, the Product is warranted to be free from defects in materials & factory workmanship for the period set out in table below:

	PRODUCT GROUPS	PARTS	LABOUR	
	Evaporative Coolers & Ducted Gas Heaters (excluding Compact Classic Series)	5 Years *Extended 4 Years Option	5 Years *Extended 4 Years Option	
	Ducted Gas Heaters - Compact Classic Series	3 Years	3 Years	
Residential and Light Commercial	Refrigerated Airconditioning Products	5 Years	5 Years	
	Ducted Gas Heaters - Heat Exchangers and Burners Evaporative Coolers - Structural components only	10 Years	N/A	
	Portable Air conditioning	2 Years	N/A	
	Wi-Fi Devices	1 Year	1 Year	
Other Applications	All Product Groups	2 Years	1 Year	
After Market	Spare Parts	1 Year	N/A	
*Extended Warranty Option	Up to 4 year extended warranty (in addition to the standard warranty period listed above) applies on selected products when you opt in to the Rinnai Service Advantage program. This program has terms and conditions, including the requirement for scheduled servicing of the product by Rinnai. To participate in the program you must register your product online at: www.rinnai.com.au/ support-resources/ warranty-registration/ within the first 12 months of the product being installed.			

- 2.2 Rinnai will determine in its sole discretion, which classification the Product fits into and the corresponding Warranty that shall apply.
- 2.3 An Authorised Service Representative will repair or replace, at its option, the Product or any part of the Product that its examination shows to be defective. The repair or replacement shall be performed during Normal Business Hours by an Authorised Service Representative. Repair by persons other than an Authorised Service Representatives may void the Warranty.
- 2.4 Alternatively to clause 2.3 above, Rinnai can at its discretion elect to pay you an amount equivalent to the cost of repairing or replacing the Product.
- 2.5 If Rinnai provides you with either the replacement costs or replacement product, ownership of the original Product shall immediately transfer to Rinnai.
- 2.6 Rinnai is responsible for reasonable costs associated with legitimate warranty claims, including call-out of an Authorised Service Representative to inspect the Product. Rinnai is not responsible for:
 - a) costs for tradespeople engaged by you that are not Rinnai Authorised Service Representatives.
 - b) any costs, including call out costs for a Rinnai Authorised Service Representatives, associated with a Product which is determined upon inspection not to be covered by this warranty.
- 2.7 Rinnai will reimburse any reasonable costs associated with making a legitimate warranty claim against Rinnai which are not otherwise specified above.
- 2.8 The Warranty of the Product requires that, in addition to all other conditions, the Purchaser conducts regular and/or preventative maintenance as may be specified by the Operating/Installation Instructions or otherwise directed by Rinnai and required by the level of usage and the usage environment, including the use of correct and uncontaminated refrigerants and lubricants. Refrigeration, plumbing and electrical works must be undertaken by licensed personnel.
- 2.9 Where a Product or failed component is replaced under warranty, the time remaining on the original Product warranty period will continue to apply and the replacement product or part will be subject to the original warranty period only.

3 CONDITIONS OF WARRANTY

- 3.1 The Purchaser may only obtain the benefit of the Warranty if the Purchaser:
 - a) maintains and has the Product serviced in accordance with the instructions set out in the service section of the relevant Service or Owner's Manual;
 - b) complies with clause "7 Purchaser's Responsibilities" on page 22;
 - c) notifies Rinnai within 30 days of a defect occurring or, in the case of a latent defect, becoming apparent, that a claim is being made under this Warranty; and
 - d) provides, in support of the claim made under this Warranty, a Proof of Purchase.
- 3.2 This document (and any statutory consumer guarantees) represents the only Warranty given by Rinnai in respect of the Product. No other person or organisation is authorised to offer any alternative warranty on behalf of Rinnai.
- 3.3 If the date of purchase cannot be established to Rinnai's satisfaction, the date shall be deemed to be 2 months after the date of manufacturer or the date of sale by Rinnai, whichever is the latter.
- 3.4 This warranty applies to Products which are manufactured on or after the date of publication of this warranty but before the next date of publication of this warranty.

4 **EXCLUSIONS**

- 4.1 This Warranty does NOT cover:
 - a) damage, problems or failure resulting from improper operation and/or inadequate maintenance by the Purchaser (refer Purchaser's Responsibilities section below);
 - b) damage, problems or failure resulting from improper or faulty installation. The Product must be installed by a Qualified Installer in accordance with applicable regulations. Where applicable, Certificate(s) of Compliance must be obtained by the purchaser from the Qualified Installer and presented to the Authorised Service Representative;
 - c) damage, problems or failure caused by factors external to the Product including, but not limited to, faulty
 or poor external electrical wiring, incorrect or faulty power supply, voltage fluctuations, over voltage
 transients or electromagnetic interference, inadequate or faulty gas, drainage services, or water services,
 including water pressure, and non-potable water;
 - d) damage, problems or failure caused by acts of God, fire, wind, lightning, flood, storm, hail storm fallout, vandalism, earthquake, war, civil insurrection, misuse, abuse, negligence, accident, pests, animals, pets, vermin, insects, spiders/bugs or entry of foreign objects or matter into the Product such as dirt, debris, soot or moisture;
 - e) damage, problems or failure caused by environmental conditions including, but not limited to, excessive moisture, salt or other corrosive substances or atmospheric conditions;
 - f) Product which has been installed in a portable or mobile building, structure or application including, but not limited to, a caravan, boat or trailer;
 - g) Product which has been re-installed at a location other than the original site;
 - h) any consumable item supplied with the Product including, but not limited to, an air filter, battery, fan belt, igniter or cooler pad;
 - installation of third-party components that may be attached to the Product. These include, but are not limited to, control wiring, ducting, return air filter(s) grille, register, diffuser, zone motors, controls/ thermostats, pipe work and fabricated or added components. These items remain solely the responsibility of the Qualified Installer;
 - j) installations where electrics/electronics may be subjected to moisture/chemicals (e.g. swimming pools or nurseries);
 - k) any repair, which is needed as a result of an accident, misuse, abuse or negligence;
 - I) Product that is utilised in an environment (indoor and outdoor) outside its specified operating range; and
 - m) fair wear and tear to the Product.
 - n) On-site labour warranty on portable (non-fixed installation) Products In respect of such Products the Purchaser must return the Product to the supplier for repair or replacement).

5 LIMITATIONS

- 5.1 Third parties are often involved in providing advice to consumers about the climate control solutions best suited to the consumer's needs. Any advice or recommendations given by such parties, including advice about Product fitness for purpose and overall system design, sizing and application are not the responsibility of Rinnai. This includes but is not limited to the heat load calculations, airflow and system balancing.
- 5.2 This Warranty does not apply to any Product installed at an Installation Site which is outside Australia.
- 5.3 Except where inconsistent with the purchaser's statutory rights and the rights given by this Warranty, all liabilities of Rinnai for any direct, special, indirect or consequential loss or damage, any damage or expense for personal injury or any loss or destruction of property, arising directly or indirectly from the use or inability to use the Product or any of its parts and/or servicing the Product, are expressly excluded.

6 TRAVEL, TRANSPORT & ACCESS COSTS

- 6.1 The Purchaser must pay freight charges, in-transit insurance expenses and travelling costs for repairs/ replacements under this Warranty, that are required to be performed 50km from the nearest Rinnai branch or Authorised Service Representative.
- 6.2 Subject to clause 6.3, Rinnai will pay freight charges, in-transit insurance expenses and travelling costs for repairs/replacements that are required to be performed less than 50km from the nearest Rinnai branch or Authorised Service Representative, subject to the following:
 - a) Rinnai will arrange for such repairs/replacements and make any payment directly to the third party to provide the freight, in-transit insurance or travel services; or
 - b) if Rinnai considers appropriate, it will authorise the Purchaser in writing to pay for the relevant freight charges, in-transit insurance expenses or travelling costs and then, upon provision by the Purchaser to Rinnai of a tax invoice showing those costs have been incurred, reimburse the Purchaser for such costs which are within the terms of the authorisation. If the Purchaser pays for the relevant freight charges, in-transit insurance expenses or travelling costs without written authorisation from Rinnai, Rinnai will not reimburse the Purchaser for such costs.
- 6.3 The Purchaser must pay all costs and expenses in respect of:
 - a) any service call out fee if the Product is not accessible for service
 - b) making the Product accessible for service, for example, restricted access or working at heights, or the labour cost for an additional person due to OHS requirements.
 - c) providing a safe working environment for installation, service, maintenance or repair of the Product;
 - d) any surcharge applicable in respect of supplying replacement parts outside Normal Business Hours; and
 - e) any other costs and expenses in relation to claiming the Warranty that is not covered by clause 6.2.

7 PURCHASER'S RESPONSIBILITIES

- 7.1 The Purchaser must operate and maintain the Product in accordance with the Operating Instructions and service maintenance schedule, including conducting an appropriate number of services to the unit during the Warranty period, based on usage and the usage environment including but not limited to;
 - a) regularly cleaning the air filter(s) and replacing them where necessary;
 - b) replacing expired batteries or other consumables as required;
 - c) ensuring that the condensate drain is kept clean and clear of obstructions.

HOW TO MAKE A WARRANTY CLAIM:

If you wish to make a warranty claim in respect of any Portable Product, please return it to the place of purchase, or if that is not possible, contact Rinnai to enquire about alternative arrangements.

If you wish to make a warranty claim in respect of any fixed Product, please contact Rinnai on the details set out below to make arrangements for an Authorised Service Representative to inspect the product.

As per clause 2.6 of the Terms and Conditions of Warranty, purchasers are responsible for the costs of any repair and/or call out fee where, on inspection, the alleged defect is found by Rinnai's Authorised Service Representative not to be covered by this warranty or any statutory consumer guarantee applicable to the Product.

The Terms and Conditions of Warranty contain important information about your rights and obligations under this warranty. Please read them fully and carefully before making a claim.

NOTES

Rinnai Australia Pty Ltd

ABN 74 005 138 769 | AU45204

100 Atlantic Drive, Keysborough, Victoria 3173 P.O. Box 460, Braeside, Victoria 3195

Tel: (03) 9271 6625 Fax: (03) 9271 6622

National Help Line

Tel: 1300 555 545* Fax: 1300 555 655 Monday to Friday, 8.00 am to 5.00 pm EST.

*Cost of a local call higher from mobile or public phones.

For further information visit www.rinnai.com.au or email enquiry@rinnai.com.au

Rinnai New Zealand Ltd

105 Pavilion Drive, Mangere, Auckland PO Box 53177, Auckland Airport, Auckland 2150

Tel: (09) 257-3800 Toll Free: 0800 764-624

For further information visit:

www.rinnai.co.nz youtube.com/rinnainz facebook.com/rinnainz or email info@rinnai.co.nz

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call our National Help Line. Rinnai recommends that this appliance be serviced in accordance with the routine maintenance and service schedule.

With our policy of continuous improvement, we reserve the right to change, or discontinue at any time, specifications or designs without notice.